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				2178

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/736,745	NAGAHARA ET AL.
	Examiner	Art Unit
	David Faber	2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-62 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-62 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 December 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/17/2003.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. This office action is in response to the office action 17 December 2003. Applicant's preliminary amendment filed on 17 December 2003 has been entered.
This action is made Non-Final.
2. Claims 1-62 are pending. Claims 1, 3, 5, 12, 20 – 34, and 38-41 are independent claims.

Priority

3. Applicant's claim for priority under 35 U.S.C. 119(a)-(d) is acknowledged.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 17 December 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The drawings filed on 17 December 2003 have been accepted.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 34-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. One of ordinary skill in the art at the time of Applicant's invention would have understand by Applicant use of the term barycenter disclosed in the specification and in Claims 34-35 does where one of ordinary skill in art unclear what a barycenter is represented or what a barycenter is defined as.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-62 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims containing a layout system, a layout program, and a layout method appear to be claiming "software systems", which is computer program per se.

Section 2106 of the MPEP states:

(a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings Per Se
Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure

and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim.

Since the computer program is not embodied on a tangible computer readable medium, they appear non-statutory.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 1, 3, 27, 33, and 36-41 are rejected under 35 U.S.C. 102(b) as being

anticipated by Templeman (US Patent #5,845,303, patented 12/1/1998).

As per independent Claim 1, Templeman discloses a system:

- a layout section for laying out listed information, the layout section generating a layout by storing the listed information in a plurality of information storage frames arranged in a predetermined layout region, (FIG 3A; Column 5, lines 15-20, 30-52: Templeman discloses a layout containing frames, used to store information such as text and graphics, in a defined format)
- wherein a movable direction of the information storage frames on the layout region is set, and (Abstract, lines 8-12: Discloses when data is placed within a frame, constraints are solved wherein a frame is sized to accommodate the input data. Templemann discloses an embodiment, Column 8, lines 63 – 66, wherein a frame is moved in the Y-direction to allow more data to be place in a frame above it. This embodiment shows a movable direction. The direction is determined or set dynamically by the metaform constraints by a constraint system (Column 9, lines 5-34))
- the layout section is set to move one of the information storage frames along the movable direction relative to the other information storage frames. (Column 8, lines 63 – 66: Discloses a title frame being repositioned on the Y-direction axis to allow the header frame to expand to accommodate additional data.

As per independent Claim 3, Claim 3 recites similar limitations as in Claim 1 and is rejected under rationale. Furthermore, Templeman discloses a system:

- wherein a movable region of the information storage frames on the layout region is set, and (Column 10, lines 46-47 discloses a metaform containing a list of constraints wherein the constraints govern the content and appearance of the metaform (Column 5, lines 18-20) are employed to maintain consistent relationships between the frames as the frames change size and/or location.(Column 8, 45-48) Thus, FIG 3A, 4 discloses a template based on constraints that show regions or frames that are movable by being repositioned when information is flowed into the region. Column 8, lines 63-67, discloses these regions being able to be dynamically repositioned when data is inputted. (Column 15, lines 8-10)
- the layout section is set to move one of the information storage frames along the movable region relative to the other information storage frames. (Column 8, lines 63 – 66: Since within a metaform is considered a movable region, Templeman discloses a title frame being repositioned on the Y-direction axis to allow the header frame to expand to accommodate additional data within a metaform.)

As per independent Claim 27, Templeman discloses a system comprising:

- layout section for generating a layout by arranging a plurality of information storage frames movably on a layout region and storing listed information in the information storage frames, (Templeman discloses a metaform used that are layouts that have defined formats that include a number of frames into which specific types of data may be inputted which include constraints that govern the appearance of the metaform (Column 5, lines 18-20. These constraints allow each of the frames to resize or change location. (Column 8, lines 45-47))
- wherein the layout section forms the information storage frames into a group and is set to move at least one of the information storage frames belonging to the same group so as to have a predetermined relative positional relationship with each other. (Each metaform contains a defined format that includes a number of frames arranged in a form in which constraints govern the appearance (Column 5, lines 18-20, 30-32) whereby the frames are grouped together into a set position by the metaform and its constraints.)

As per dependent Claim 33, Templeman discloses a system:

- layout system is set so that the information storage frames are expandable or reducible according to an amount of the listed information, and when the positional relationship is changed by expansion or reduction, some or all of the information storage frames are further moved so as to have an original

relative positional relationship, so that the layout is generated. (Templeman discloses when the input data such as text is greater than the frame is able to handle, the size of the frame increases to handle the input data, and moves frames around that current frame to original positional relationship to avoid overlapping. (Column 8, line 65 – Column 9, line 8))

As per dependent Claim 36, Templeman discloses a system:

- when the information storage frames are moved, the layout section is set to move the information storage frames to a position where none of the information storage frames overlaps allocated information storage frames of another group, so that the layout is generated. (Templeman discloses when the title frame position has been affected and changed, the position of the body frame is also affected and changed. (Column 9, lines 21-30) This process moves each frame into a position that avoids overlapping.)

As per dependent Claim 37, Templeman discloses a system:

- the layout section is set to lay out the information storage frames based on a template for defining a layout of the listed information beforehand. (Column 5, lines 18-20, 30-32: Discloses frames are laid out in a defined format within a metaform for data to be inputted)

As per independent Claim 38, Claim 38 recites a layout program..... for performing similar limitations as in Claim 27 and therefore is similarly rejected under Templeman.

As per independent Claim 39, Claim 39 recites a layout program..... for performing similar limitations as in Claims 27 and 33 and therefore are similarly rejected under Templeman.

As per independent Claim 40, Claim 40 recites a layout method for performing similar limitations as in Claim 27 and therefore is similarly rejected under Templeman.

As per independent Claim 41, Claim 41 recites a layout method for performing similar limitations as in Claims 27 and 33 and therefore are similarly rejected under Templeman.

11. Claims 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Sams Publishing (Sams Publishing, "Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes", published 5/6/1999, printed pages 1-27)

As per independent Claim 28, Sams Publishing discloses a system comprising:

- layout section for generating a layout by arranging a plurality of information storage frames movably on a layout region and storing listed information in the information storage frames, (Sams Publishing discloses Microsoft Publisher enables a user be able to create a frame, where multiple frames can be create, for information to be placed within each frame. (p14-16))

- wherein the layout section forms the information storage frames into a group, arranges the information storage frames, which belong to the same group, laterally on the layout region, and is set to move some or all of the information storage frames vertically so as to align upper ends or lower ends, so that the layout is generated. (Sams Publishing discloses Microsoft Publisher enables frames to be grouped together and enable to move the group of all frames to a new position.(p24-25) In addition, a user could set the position using a size and position option to move the frame vertically that can be used to align upper or lower ends. (p17-22))

As per independent Claim 29, Claim 29 recites similar limitations as in Claim 28 and is rejected under rationale. Furthermore, Sams Publishing discloses a system comprising:

- wherein the layout section forms the information storage frames into a group, arranges the information storage frames, which belong to the same group, vertically on the layout region, and is set to move some or all of the information storage frames laterally so as to align upper ends or lower ends, so that the layout is generated. (Sams Publishing discloses the ability to move a frame to a new position selecting a frame and moving it to a new position. (p21-22) In addition, a user could set the position using a size and position option to move the frame horizontally that can be used to align upper or lower ends. (p17-22))

As per independent Claim 30, Claim 30 recites similar limitations as in Claim 28 and is rejected under rationale. Furthermore, Sams Publishing discloses a system comprising:

- information composed of a character string of horizontal writing (After creating the frame, you can type text into the frame shown in FIG 8.2 (p17-18))
- move frames vertically so as to align row positions (Sams Publishing discloses the ability to move a frame to a new position selecting a frame and moving it to a new position. (p21-22) In addition, a user could set the position using a size and position option to move the frame vertically that can be used to align row positions.) (p17-22))

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 34-35, 56, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Templeman (US Patent #5,845,303, patented 12/1/1998).

As per independent Claim 34, Claim 34 recites similar limitations as in Claims 27 and 33 combined and are similarly rejected under rationale. Furthermore, Templeman fails to specifically disclose determines a relative positional relationship between

barycenters of the information storage frames before storing the listed information, and when a barycenter of the information storage frame serving as a reference is displaced by expansion or reduction of the information storage frame, the layout section is set to displace barycenters of the other information storage frames according to a displacement amount to maintain the predetermined relative positional relationship, so that the layout is generated. However, Templeman discloses each metaform contains fixed constraints that define distances between columns or width of columns, and constraints that can be defined that maintain an alignment between two objects, despite the ability of the objects to expand or contract. Since the distances and alignment are defined, one in ordinary skill knows the distances between two objects. Therefore, it was well-known in the art at the time of applicant's invention if the distances were known between two objects, a halfway, or center point can be determined or calculated. Thus, one could use the halfway point when defining a constraint defining a distance with the alignment between two objects.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with determining a halfway point with the known distance since it would have provided the benefit of user customization and flexibility in dynamic presentation of information when creating, manipulating, and displaying information.

As per dependent Claim 35, Claim 35 recites similar limitations as in Claims 34 combined and is similarly rejected under rationale. Furthermore, Templeman discloses a system:

- the layout section is set to reduce a distance between the barycenters while maintaining a ratio of distances in the relative positional relationships of the information storage frames, so that the layout is generated. (Based on a metaform's constraints that defined fixed distances between two objects (Column 5, lines 13-20; Column 8, lines 39-48), Templeman discloses an embodiment where if the title frame's position changes, then the position of body column frame will also change to maintain the fixed distance between the two frames. (Column 9, lines 19-30) In addition, Templeman discloses when the title header frame expands, the title frame may be repositioned downward to maintain the fixed distance between the two frames (Column 8, lines 65-67))

As per dependent Claim 56, Templeman discloses a system:

- when the information storage frames are moved, the layout section is set to move the information storage frames to a position where none of the information storage frames overlaps allocated information storage frames of another group, so that the layout is generated. (Templeman discloses when the title frame position has been affected and changed, the position of the body frame is also affected and changed. (Column 9, lines 21-30) This process moves each frame into a position that avoids overlapping.)

As per dependent Claim 62, Templeman discloses a system:

- the layout section is set to lay out the information storage frames based on a template for defining a layout of the listed information beforehand.

(Templeman, Column 5, lines 18-20, 30-32, discloses frames are laid out in a defined format within a metaform for data to be inputted.)

14. Claims 2, 4, 5-20, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Templeman (US Patent #5,845,303, patented 12/1/1998) in further view of Simmons et al (US PGPub 2004/003350, filed 6/28/2002)

As per dependent Claim 2, Claim 2 recites similar limitations as in Claim 1 and is rejected under rationale. Furthermore, Templeman fails to specifically disclose when the plurality of information storage frames overlap each other with the listed information stored in the information storage frames, the layout section moves at least one of the plurality of overlapping information storage frames along the movable direction of the information storage frames so that the plurality of overlapping information storage frames do not overlap with each other. However, Simmons et al discloses a method when two objects containing information overlap each other within a document. (FIG 7) Simmons et al's method determines the shortest distance between the x and y axis, and moves an object based on the calculation of the shortest distance, thus setting a movable direction, and moving the object based on that direction within the document, to remove the overlap between the two objects. (e.g. Paragraphs 0044-45)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 4, Claim 4 recites similar limitations as in Claim 3 and is rejected under rationale. Furthermore, Templeman fails to specifically disclose when the plurality of information storage frames overlap each other with the listed information stored in the information storage frames, the layout section moves at least one of the plurality of overlapping information storage frames along the movable direction of the information storage frames so that the plurality of overlapping information storage frames do not overlap with each other.

However, Templeman fails to specifically discloses when the information storage frames still overlap each other, the layout section is set to move the information storage frame in another region of the plurality of movable regions. Simmons et al discloses an information region/object has been modified with additional text which result the text object overlapping with another object/region containing a drawing. (Paragraph 0039) After determining the shortest distance, the other object containing the drawing is moved straight down to resolve overlapping. (Paragraph 0041)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 5, Claim 5 recites similar limitations as in Claims 1 and 2 combined and are rejected under rationale. Templeman discloses a system:

- listed information storage section for storing two or more pieces of listed information (e.g. Column 5, lines 8-10)
- a template storage section for, regarding the predetermined layout region, storing a template for specifying a matter about the information storage frames arranged in the layout region, (Column 11, line 53 – Column 12, line 4: Discloses a system using application software that may contain a library of metaforms)
- the template can set a movable direction along which the information storage frames moves on the layout region (FIG 3A; Column 5, lines 15-20, 30-52: Templeman discloses a metaform having a layout containing frames, used to store information such as text and graphics, in a defined format. In addition, Abstract, lines 8-12, discloses when data is placed within a frame, constraints are solved wherein a frame is sized to accommodate the input data. Templemann discloses an embodiment, Column 8, lines 63 – 66, wherein a frame is moved in the Y-direction to allow more data to be place in a frame above it. This embodiment shows a movable direction. The direction is determined or set dynamically by the metaform constraints by a constraint system (Column 9, lines 5-34))
- the layout section stores the listed information in the plurality of information storage frames according to the template of the template storage section, (e.g. Column 3, lines 14-25)

However, Templeman fails to specifically disclose:

- listed information selecting section for selecting desired listed information from the listed information registered in the listed information storage section

However, Templeman discloses input data is received to the system through information channels and placed into the metaform to be displayed within the metaform. (Column 10, lines 8-12; Abstract) It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention that the user would have selected the data to be placed into the metaform prior to placement using Templeman's method since it would have provided the benefit of user customization and flexibility in creating, manipulating, and displaying information.

As per dependent Claim 6, Templeman discloses a system comprising:

- the template is a page template for specifying, regarding the layout region constituting a page, at least one of a shape, size, or arrangement of the information storage frame arranged in the layout region. (Column 5, lines 13-20; FIG 4, Column 8, lines 23-28: Disclose the arrangement of frames within a metaform)

As per dependent Claim 7, Templeman discloses a system comprising:

- wherein the movable direction is at least one of a first direction in a layout plane, a second direction opposed to the first direction, a third direction, and a fourth direction, the third and fourth directions being opposed to each other and perpendicular to the first and second directions. (Abstract, lines 8-12:

Discloses when data is placed within a frame, constraints are solved wherein a frame is sized to accommodate the input data. Templemann discloses an embodiment, Column 8, lines 63 – 66, wherein a frame is moved in the Y-direction to allow more data to be placed in a frame above it. This embodiment shows a movable direction. The direction is determined or set dynamically by the metaform constraints by a constraint system (Column 9, lines 5-34))

As per dependent Claim 8, Templeman discloses a system:

- the page template can set the plurality of different movable directions for one information storage frame, (Each metaform contain constraints that allow frames to change sizes and/or location. (Column 5, lines 18-20; Column 8, 45-48). Constraints can be multi-way wherein constraints operate in multiple directions based on the concept on one-way constraint. (Column 9, lines 15-22) An embodiment where a frame expands in multiple direction based on constraints is disclosed using multi-way constraints. Thus, template sets multiple directions using its constraints. (Column 10, lines 46-65))
- the layout section is set to move the information storage frames along one of the plurality of movable directions. (Column 8, lines 63 – 66: Since within a metaform is considered a movable region, Templeman discloses a title frame being repositioned on the Y-direction axis to allow the header frame to expand to accommodate additional data within a metaform.)

However, Templeman fails to specifically disclose when the information storage frames still overlap each other, the layout section is set to move the information storage frames along another direction of the plurality of movable directions. However, Simmons et al discloses a method when two objects containing information overlap each other within a document. (FIG 7) Simmons et al's method determines the shortest distance between the x and y axis, and moves an object based on the calculation of the shortest distance, thus setting a movable direction, and moving the object based on that direction within the document to remove the overlap between the two objects. (e.g. Paragraphs 0044-45) The shortest distance determined is considered as the highest priority set and moves the object based on it. In addition, Simmons et al discloses if an object having the shortest distance moved to the side and goes off the screen, it creates a problem since it is not suppose to go off the screen. Thus, the object moves down as its alternative direction. (Paragraph 0048, lines 10-17)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 9, Templeman fails to specifically disclose:

- wherein a priority order is set for the plurality of movable directions, and the layout section is set to move the information storage frames along a direction having the highest priority of the plurality of movable directions, and the layout

section is set to move the information storage frames along a direction having the second highest priority of the plurality of movable directions when the information storage frames still overlap each other.

However, Simmons et al discloses a method when two objects containing information overlap each other. (FIG 7) Simmons et al's method determines the shortest distance between the x and y axis, and moves an object based on the calculation of the shortest distance, thus setting a movable direction, and moving the object based on that direction within the document to remove the overlap between the two objects. (e.g. Paragraphs 0044-45) The shortest distance determined is considered as the highest priority set and moves the object based on it. In addition, Simmons et al discloses if an object having the shortest distance moved to the side and goes off the screen, it creates a problem since it is not suppose to go off the screen. Thus, the object moves down as its alternative or second priority. (Paragraph 0048, lines 10-17)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 10, Templeman fails to specifically disclose a common movable direction for the plurality of information storage frames can be set in the page template and when any one of the plurality of information storage frames, which has the set common movable direction, overlaps another information storage frame with the

listed information stored in the information storage frames, the layout section is set to move the plurality of information storage frames, which have the set common movable direction, along the common movable direction.

However, Simmons et al discloses objects can moves the object in a direction that has the shortest distance, wherein the direction include straight down, or straight to the right or left. (Paragraph 0009) Simmons et al discloses a method when two objects containing information overlap each other within a document. (FIG 7) Simmons et al's method determines the shortest distance between the x and y axis, and moves an object based on the calculation of the shortest distance, thus setting a movable direction, and moving the object based on that direction, either straight down or to the side to remove the overlap between the two objects. (e.g. Paragraphs 0044-45)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 11, Claim 11 recites similar limitations as in Claims 8 and 10 combined and are rejected under rationale.

As per dependent Claim 12, Claim 12 recites similar limitations as in Claims 4 and 5 combined and are rejected under rationale. Furthermore, Templeman discloses a system comprising:

- the template can set a movable region in which the information storage frame moves on the layout region (FIG 3A, 4 discloses a template that show regions or frames that are movable by being repositioned when information is flowed into the region. Column 8, lines 63-67, discloses these regions being able to be dynamically repositioned when data is inputted. (Column 15, lines 8-10)

As per dependent Claim 13, Claim 13 recites similar limitations as in Claims 6 and is rejected under Templeman and Simmons et al.

As per dependent Claim 14, Templeman discloses a system:

- wherein the shape of the movable region is at least one of a rectangle shape, circular shape, and other geometric shapes. (FIG 3A, 4: The template composes of rectangular shapes)

As per dependent Claim 15, Templeman discloses a system:

- wherein a plurality of different movable regions for each of the information storages can be set in page template and the layout section is set to move the information storage frame in one of the plurality of movable regions. (FIG 3A, 4 discloses a template that show multiple regions or frames that are movable by being repositioned when information is flowed into the region. Column 8, lines 63-67, discloses these regions being able to be dynamically repositioned when data is inputted. (Column 15, lines 8-10)

However, Templeman fails to specifically discloses when the information storage frames still overlap each other, the layout section is set to move the information storage frame in another region of the plurality of movable regions. Simmons et al discloses an

information region/object has been modified with additional text which result the text object overlapping with another object/region containing a drawing. (Paragraph 0039)

After determining the shortest distance, the other object containing the drawing is moved straight down to resolve overlapping. (Paragraph 0041)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 16, Templeman fails to specifically disclose:

- wherein a priority order is set for the plurality of movable regions, and the layout section is set to move the information storage frames in a region having the highest priority among the plurality of movable regions

However, Templeman fails to specifically discloses when the information storage frames still overlap each other, the layout section is set to move the information storage frame in another region of the plurality of movable regions. Simmons et al discloses an information region/object has been modified with additional text which result the text object overlapping with another object/region containing a drawing. (Paragraph 0039)

After determining the shortest distance, the other object containing the drawing is moved straight down to resolve overlapping. (Paragraph 0041). In addition, Simmons et al discloses if an object/region having the shortest distance moved to the side and goes off the screen, it creates a problem since it is not suppose to go off the screen. Thus,

the object/region moves down as its alternative or second priority. (Paragraph 0048, lines 10-17)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 17, Templeman discloses a system:

- wherein the plurality of movable regions can be set across pages (Templeman discloses when information is flowing into regions, a second page of the metaform containing of new frames may be created, thus setting regions across multiple pages. (Column 9, lines 61-64; Column 11, lines 30-40)

As per dependent Claim 18, Templeman discloses a system:

- wherein a common movable region for the plurality of information storage can be set in the page template (FIG 3A, 4 discloses a template that show regions or frames that are movable by being repositioned when information is flowed into the region. Column 8, lines 63-67, discloses these regions being able to be dynamically repositioned when data is inputted. (Column 15, lines 8-10)

However, Templeman fails to specifically disclose when any one of the plurality of information storage frames, which has the set common movable direction, overlaps

another information storage frame with the listed information stored in the information storage frames, the layout section is set to move the plurality of information storage frames, which have the set common movable direction, along the common movable direction. However, Simmons et al discloses objects can moves the object that has the shortest distance either include straight down, or straight to the right or left. (Paragraph 0009). Simmons et al discloses an information region/object has been modified with additional text which result the text object overlapping with another object/region containing a drawing. (Paragraph 0039) After determining the shortest distance, the other object containing the drawing is moved either straight down or to the side to resolve overlapping. (Paragraph 0041, 0044, 0045)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per dependent Claim 19, Claim 19 recites similar limitations as in Claim 15 and is rejected under Templeman and Simmons et al.

As per independent Claim 20, Claim 20 recites similar limitations as in Claims 5 and is rejected under rationale. Furthermore, Templeman discloses a system comprising:

- the template can set a movable direction along which the information storage frame moves on the layout region, (Abstract, lines 8-12: Discloses when data is placed within a frame, constraints are solved wherein a frame is sized to

accommodate the input data. Templemann discloses an embodiment, Column 8, lines 63 – 66, wherein a frame is moved in the Y-direction to allow more data to be placed in a frame above it. This embodiment shows a movable direction. The direction is determined or set dynamically by the metaform constraints by a constraint system (Column 9, lines 5-34))

- and a movable region, (Column 10, lines 46-47 discloses a metaform containing a list of constraints wherein the constraints govern the content and appearance of the metaform (Column 5, lines 18-20) are employed to maintain consistent relationships between the frames as the frames change size and/or location.(Column 8, 45-48) In addition, metaforms may be customized for use with display types and sizes to utilize available screen space. (Column 5, lines 27-29) Therefore, within a metaform itself is considered as a whole a movable region wherein frames move around freely based on the constraints.

However, Templeman fails to specifically disclose the layout section stores the listed information in the plurality of information storage frames according to the template of the template storage section, and when the plurality of information storage frames overlap each other, the layout section is set to move the overlapping information storage frames in the movable region along the movable direction based on a setting on the movable direction and the movable region in the template to a position where the information storage frames do not overlap each other.

However, Simmons et al discloses objects can moves the object that has the shortest distance either include straight down, or straight to the right or left. (Paragraph 0009). Simmons et al discloses an information region/object has been modified with additional text which result the text object overlapping with another object/region containing a drawing. (Paragraph 0039) After determining the shortest distance, the other object containing the drawing is moved either straight down or to the side to resolve overlapping. (Paragraph 0041, 0044, 0045)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

As per independent Claim 23, Claim 23 recites a layout program..... for performing similar limitations as in Claim 2 and therefore is similarly rejected under Templeman and Simmons et al.

As per independent Claim 24, Claim 24 recites a layout program..... for performing similar limitations as in Claim 4 and therefore is similarly rejected under Templeman and Simmons et al.

As per independent Claim 25, Claim 25 recites a method for performing similar limitations as in the combination of Claims 1 and 2 and therefore is similarly rejected under Templeman and Simmons et al.

As per independent Claim 26, Claim 26 recites a method for performing similar limitations as in the combination of Claims 3 and 4 and therefore is similarly rejected under Templeman and Simmons et al.

15. Claims 21-22, and 42-45 rejected under 35 U.S.C. 103(a) as being unpatentable over Templeman (US Patent #5,845,303, patented 12/1/1998) in further in view of Simmons et al (US PGPub 2004/003350, filed 6/28/2002) in further view of Sams Publishing (Sams Publishing, "Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes", published 5/6/1999, printed pages 1-27)

As per dependent Claim 21, Templeman discloses all information and documents are retrieved from an information source such as commercial databases, bulletin board systems or a computer system's own mass storage device. (Column 4, lines 25-30; Column 5, lines 5-12) However, Templeman and Simmons et al fails to specifically disclose comprising user information storage section for storing user information about a user, and wherein the listed information selecting section selects the listed information from the listed information storage section based on the user information of the user information storage section. However, Sams Publishing enables a person to use a layout program such Microsoft Publisher that contains a Publication Wizards that enables a person to create template publication based on the user's interests and choosing or use a pre-created publication where the user can edit the scheme and colors. (p1-5, 9-12) In addition, the user can create a personal profile that contains personal information to use when creating business cards within Publisher that retrieves

information from the profile to create a personalized business card. (p5-7) Once created, the user has the ability to save the publication to the computer. (p8) In addition, a user can load a publication that once saved to the computer where it would load the previously created publication with the user's information. (p26-27)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman and Simmons et al's method with Sams Publishing's disclosure since Sams Publishing's disclosure of Publisher provides the benefit of using Publisher which is an easy-to-use desktop publishing tool that allows a user to create variety types of publications to look professional.

As per dependent Claim 22, Claim 22 discloses recites similar limitations as in Claims 5 and 21 combined and is rejected under rationale. Furthermore, Templeman fails to specifically disclose wherein the layout section lays out listed information, which is selected by the listed information selecting section, based on the user information of the user information storage section. However, Sams Publishing discloses when a business card publication is being laid out, personal information from the personal profile is supplied into the business card, therefore laying out the information based on the user information. (p5-7)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Templeman and Simmons et al's method with Sams Publishing's disclosure since Sams Publishing's disclosure of Publisher provides the benefit of using Publisher which is an easy-to-use desktop publishing tool that allows a user to create variety types of publications to look professional.

As per dependent Claim 42, Claim 42 recites similar limitations as in Claims 21 and is rejected under Templeman, Simmons et al, and Sams Publishing.

As per dependent Claim 43, Claim 43 recites similar limitations as in Claims 21 and is rejected under Templeman, Simmons et al, and Sams Publishing.

As per dependent Claim 44, Claim 44 recites similar limitations as in Claims 22 and is rejected under Templeman, Simmons et al, and Sams Publishing.

As per dependent Claim 45, Claim 45 recites similar limitations as in Claims 22 and is rejected under Templeman, Simmons et al, and Sams Publishing.

16. Claims 31, 49, 54 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sams Publishing (Sams Publishing, "Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes", published 5/6/1999, printed pages 1-20) in further in view of Simmons et al (US PGPub 2004/003350, filed 6/28/2002) in further view of Luker (Luker, "Microsoft Publisher 2000 Complete User Guide," pp1-134)

Examiner provides the book "Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes, published 5/6/1999" as an evidence that MS Publisher 2000 was known and available to the public at least by 5/6/1999.

As per independent Claim 31, Claim 31 recites similar limitations as in Claim 28 and is rejected under rationale. Furthermore, Sams Publishing discloses a system comprising:

- move frames vertically so as to align line positions (Sams Publishing discloses the ability to move a frame to a new position selecting a frame and moving it to a new position. In addition, a user could set the position using a size and position option to move the frame laterally that can be used to align line positions.)

However, Sams Publishing fails to specifically disclose information composed of a character string of vertical writing. On the other hand, Luker discloses Microsoft Publisher enables text using Word Art Toolbar allowing text to have vertical arrangement, thus creating a vertical string. (Page 61)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Sams Publishing's disclosure with Luker's Publisher disclosure since it would have provided the benefit of using Publisher which is an easy-to-use desktop publishing tool that allows a user to create variety types of publications to look professional.

As per dependent Claim 49, Sams Publishing and Luker fail to specifically disclose the layout system is set so that the information storage frames are expandable or reducible according to an amount of the listed information, and when the positional relationship is changed by expansion or reduction, some or all of the information storage frames are further moved so as to have an original relative positional relationship, so that the layout is generated. However, Templeman discloses when the input data such as text is greater than the frame is able to handle, the size of the frame increases to handle the input data, and moves frames around that current frame to

original positional relationship to avoid overlapping. (Column 8, line 65 – Column 9, line 8))

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Sams Publishing and Luker's disclosure of Microsoft Publisher using Templeman's method since it would have provided the benefit of user customization and flexibility in dynamic presentation of information when creating, manipulating, and displaying information.

As per dependent Claim 54, Sams Publishing and Luker fail to specifically disclose when the information storage frames are moved, the layout section is set to move the information storage frames to a position where none of the information storage frames overlaps allocated information storage frames of another group, so that the layout is generated. However, Templeman discloses when the title frame position has been affected and changed, the position of the body frame is also affected and changed. (Column 9, lines 21-30) This process moves each frame into a position that avoids overlapping.)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Sams Publishing and Luker's disclosure of Microsoft Publisher using Templeman's method since it would have provided the benefit of user customization and flexibility in dynamic presentation of information when creating, manipulating, and displaying information.

As per dependent Claim 60, Sams Publishing and Luker fails to specifically disclose the layout section is set to lay out the information storage frames based on a

template for defining a layout of the listed information beforehand. However, Templeman, Column 5, lines 18-20, 30-32, discloses frames are laid out in a defined format within a metaform for data to be inputted.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Sams Publishing and Luker's disclosure of Microsoft Publisher using Templeman's method since it would have provided the benefit of user customization and flexibility in dynamic presentation of information when creating, manipulating, and displaying information.

17. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sams Publishing (Sams Publishing, "Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes", published 5/6/1999, printed pages 1-20)

As per independent Claim 32, Sams Publishing discloses a system comprising:

- layout section for generating a layout by arranging a plurality of rectangular information storage frames movably on a layout region and storing listed information in the information storage games, (Sams Publishing disclose the ability to create a rectangular frame, wherein the user can create multiple rectangular frames and insert information into each frame, which are able to be movable.(p14-16)

However, Sams Publishing fails to specifically disclose wherein the layout section forms the information storage frames into a group, arranges the information storage frames, which belong to the same group, diagonally on the layout region, and moves

some or all of the information storage frames so as to connect corners, so that the layout is generated. However, Sams Publishing discloses the ability to reposition the frames and ability to group the frames. (p19-25) Therefore, It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to reposition all the frames in a diagonal position, wherein each corner connected, using Microsoft Publisher to group the frames together by Sams Publishing's disclosure since it would have provided the benefit of using Publisher which is an easy-to-use desktop publishing tool that allows a user to create variety types of publications to look professional.

18. Claims 46-48, 50-53, 55, 57-59 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sams Publishing (Sams Publishing, "Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes", published 5/6/1999, printed pages 1-20) in further view of Templeman (US Patent #5,845,303, patented 12/1/1998).

As per dependent Claim 46, Sams Publishing fails to specifically disclose the layout system is set so that the information storage frames are expandable or reducible according to an amount of the listed information, and when the positional relationship is changed by expansion or reduction, some or all of the information storage frames are further moved so as to have an original relative positional relationship, so that the layout is generated. However, Templeman discloses when the input data such as text is greater than the frame is able to handle, the size of the frame increases to handle the input data, and moves frames around that current frame to original positional relationship to avoid overlapping. (Column 8, line 65 – Column 9, line 8))

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Sams Publishing's disclosure of Microsoft Publisher using Templeman's method since it would have provided the benefit of user customization and flexibility in dynamic presentation of information when creating, manipulating, and displaying information.

As per dependent Claim 47, Claim 47 recites similar limitations as in Claims 46 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 48, Claim 48 recites similar limitations as in Claims 46 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 50, Claim 50 recites similar limitations as in Claims 46 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 51, Sams Publishing fails to specifically disclose when the information storage frames are moved, the layout section is set to move the information storage frames to a position where none of the information storage frames overlaps allocated information storage frames of another group, so that the layout is generated. However, Templeman discloses when the title frame position has been affected and changed, the position of the body frame is also affected and changed. (Column 9, lines 21-30) This process moves each frame into a position that avoids overlapping.)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Sams Publishing's disclosure of Microsoft

Publisher using Templeman's method since it would have provided the benefit of user customization and flexibility in dynamic presentation of information when creating, manipulating, and displaying information.

As per dependent Claim 52, Claim 52 recites similar limitations as in Claims 51 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 53, Claim 53 recites similar limitations as in Claims 51 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 55, Claim 55 recites similar limitations as in Claims 51 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 57, Sams Publishing fails to specifically disclose the layout section is set to lay out the information storage frames based on a template for defining a layout of the listed information beforehand. However, Templeman, Column 5, lines 18-20, 30-32, discloses frames are laid out in a defined format within a metaform for data to be inputted.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Sams Publishing's disclosure of Microsoft Publisher using Templeman's method since it would have provided the benefit of user customization and flexibility in dynamic presentation of information when creating, manipulating, and displaying information.

As per dependent Claim 58, Claim 58 recites similar limitations as in Claims 57 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 59, Claim 59 recites similar limitations as in Claims 57 and is rejected under Sams Publishing and Templeman.

As per dependent Claim 61, Claim 61 recites similar limitations as in Claims 57 and is rejected under Sams Publishing and Templeman.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- School of Liberal Arts Office of Information Technology (SLA IT), (SLA IT, "Microsoft Publisher 2000: General Overview,"): Discloses information regarding how to use MS Publisher 2000.

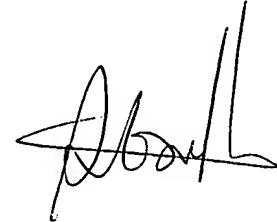
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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